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Hsieh et al.

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(54) **METHODS AND APPARATUS FOR SCOUT-BASED CARDIAC CALCIFICATION SCORING**

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(58) Field of Search **378/8, 95**

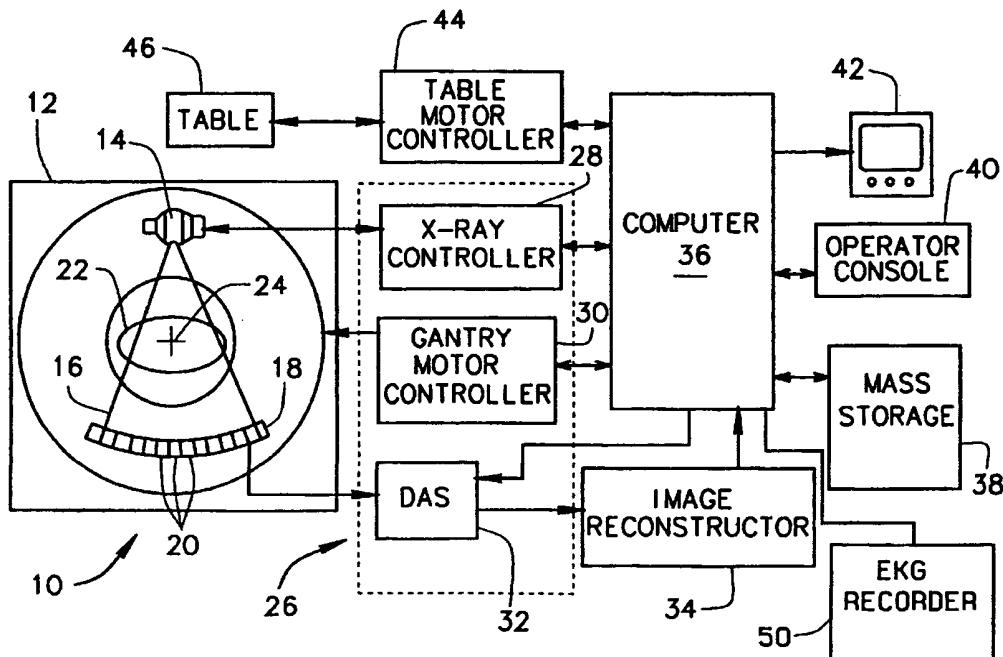
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(57) **ABSTRACT**

In one aspect, the present invention is a method for producing CT images of a patient's heart suitable for calcification scoring, in which the heart has a cardiac cycle. The method includes steps of acquiring data representative of a first scout-scanned CT image of physical locations of the patient's body including at least a portion of the patient's heart at phases $\phi_1(L)$ of the cardiac cycle, acquiring data representative of a second scout-scanned CT image of the physical locations of the patient's body including at least a portion of the patient's heart at phases $\phi_2(L)$ of the cardiac cycle different from $\phi_1(L)$ at physical positions L of interest, and determining a difference image from the acquired data representative of the first scout-scanned CT image and the acquired data representative of the second scout-scanned CT image data. It is not necessary that $\phi_1(L)$ and $\phi_2(L)$ be constant as a function of position L.

21 Claims, 5 Drawing Sheets



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